IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1. (Original) A communication handover method for use in a mobile node in a communication system in which a plurality of access routers each constituting a subnet are connected together over a communication network and at least one or more of access points forming a unique communication available area are connected to each of said plurality of access routers, said mobile node being so structured as to communicate with said access router connected with said access points, through radio communication with said access points within said communication available area, said communication handover method comprising:

a storing step of storing correspondence information describing a correspondence relationship between information on said access points and information on said access router connected to said access points into a predetermined information storage means of said mobile node;

a reception step of receiving information on another access point from said another access point when communication is

switched over from an access point currently in communication to said another access point;

an acquisition step of acquiring information on that access router to which said another access point is connected from said correspondence information based on the information on said another access point received at said reception step; and

an address generation step of generating address information in said subnet constituted by said access router, from the information on said access router acquired at said acquisition step.

2. (Original) The communication handover method according to claim 1, comprising an address information transmission step of transmitting said address information generated at said address generation step to said access router to which said access point currently in communication is connected, through said access point currently in communication.

3. (Original) A communication handover method for use in a mobile node in a communication system in which a plurality of access routers each constituting a subnet are connected together over a communication network and at least one or more of access

points forming a unique communication available area are connected to each of said plurality of access routers, said mobile node being so structured as to communicate with said access router connected with said access points, through radio communication with said access points within said communication available area, said communication handover method comprising:

a storing step of storing correspondence information describing a correspondence relationship between information on said access points and information on said access router connected to said access points into a predetermined information storage means of said mobile node;

a reception step of receiving information on another access point from said another access point when communication is switched over from an access point currently in communication to said another access point;

an acquisition step of acquiring information on that access router to which said another access point is connected from said correspondence information based on the information on said another access point received at said reception step;

a determination step of determining from the information on said access router acquired at said acquisition step whether or not changing address information currently assigned in connection

of said subnet is necessary when communication is switched from said access point currently in communication to said another access point; and

an address control step of performing such control as to continuously use said currently assigned address information upon determination that it is not necessary to change said address information at said determination step.

4. (Original) The communication handover method according to claim 3, wherein at said determination step, comparison is made to check whether or not information relating to the subnet of said access router connected to said access point currently in communication and information relating to the subnet of said access router connected to said another access point match with each other, and it is determined that changing said address information is not necessary when both information match with each other.

5. (Currently Amended) The communication handover method according to claim 1 ~~or 3~~, comprising a process switching step of performing a process based on conventional handover when the information on said access router to which said another access

point is connected cannot be acquired from said correspondence information at said acquisition step.

6. (Currently Amended) The communication handover method according to claim 1 ~~or 3~~, comprising:

a correspondence information reception step of receiving information relating to a change in said correspondence information from a predetermined communication apparatus which manages said correspondence information or said access router; and

a correspondence information update step of updating said correspondence information stored in said predetermined information storage means with the information relating to the change in said correspondence information.

7. (Original) The communication handover method according to claim 6, comprising an information check step of periodically checking said predetermined communication apparatus or said access router to see whether or not there is information relating to a new change of said correspondence information.

8. (Currently Amended) The communication handover method according to claim 1 ~~or 3~~, wherein a link layer address of said access point is used as the information on said access point, and a link layer address of said access router, a network prefix and a prefix length of said subnet constituted by said access router are used as the information on said access router.

9. (Currently Amended) The communication handover method according to claim 1 ~~or 3~~, wherein said correspondence information describes a correspondence relationship between the information on said access point in said subnet to which said mobile node is currently connected, and the information on said access router, and a correspondence relationship between the information on said access point in said subnet present in a neighborhood of said subnet to which said mobile node is currently connected and the information on said access router.

10. (Currently Amended) The communication handover method according to claim 1 ~~or 3~~, wherein said correspondence information describes only a correspondence relationship relating to said access router which employs a scheme of permitting said

mobile node to generate the address information in said subnet, and said access point connected to said access router.

11. (Currently Amended) A communication handover program for allowing a computer to execute the communication handover method according to claim 1 ~~or 3~~.

12. (Original) A communication system in which a plurality of access routers each constituting a subnet are connected together over a communication network and at least one or more of access points forming a unique communication available area are connected to each of said plurality of access routers, and a mobile node present in said communication available area is so structured as to communicate with said access router connected with said access points, through radio communication with said access points, wherein

said mobile node has correspondence information storage means for storing correspondence information describing a correspondence relationship between information on said access points and information on said access router connected to said access points into a predetermined information storage means of said mobile node, and

said mobile node is structured in such a way that when communication is switched over from an access point currently in communication to another access point, information on that access router to which said another access point is connected is acquired based on the information on said another access point received from said another access point by referring to said correspondence information, and address information in said subnet constituted by said access router is generated from said acquired information on said access router.

13. (Original) A communication system in which a plurality of access routers each constituting a subnet are connected together over a communication network and at least one or more of access points forming a unique communication available area are connected to each of said plurality of access routers, and a mobile node present in said communication available area is so structured as to communicate with said access router connected with said access points, through radio communication with said access points, wherein

said mobile node has correspondence information storage means for storing correspondence information describing a correspondence relationship between information on said access

points and information on said access router connected to said access points into a predetermined information storage means of said mobile node, and

said mobile node is structured in such a way that when communication is switched over from an access point currently in communication to another access point, information on that access router to which said another access point is connected is acquired based on the information on said another access point received from said another access point by referring to said correspondence information, and it is determined from the acquired information on said access router whether or not changing address information currently assigned in connection of said subnet is necessary when communication is switched from said access point currently in communication to said another access point, and said currently assigned address information is continuously used upon determination that it is not necessary to change said address information.

14. (Currently Amended) The communication system according to claim 12 ~~or 13~~, structured in such a way as to execute a process by conventional handover when said mobile node cannot acquire the information on said access router to which said

another access point is connected, from said correspondence information.

15. (Currently Amended) The communication system according to claim 12 ~~or 13~~, wherein a predetermined communication apparatus which manages said correspondence information is connected to said communication network, and is so structured as to transmit said correspondence information to said mobile node.

16. (Currently Amended) The communication system according to claim 12 ~~or 13~~, wherein when a change in the information on said access point or the information on said access router occurs, said predetermined communication apparatus receives the information on said access point or the information on said access router after generation of the change, from said access router, updates said correspondence information managed by said predetermined communication apparatus, and informs said mobile node that said correspondence information has been changed.

17. (Currently Amened) The communication system according to claim 12 ~~or 13~~ structured in such a way that management of said correspondence information is performed by said access

router to realize said predetermined communication apparatus by said access router.

18. (New) The communication handover method according to claim 3, comprising a process switching step of performing a process based on conventional handover when the information on said access router to which said another access point is connected cannot be acquired from said correspondence information at said acquisition step.

19. (New) The communication handover method according to claim 3, comprising:

a correspondence information reception step of receiving information relating to a change in said correspondence information from a predetermined communication apparatus which manages said correspondence information or said access router; and

a correspondence information update step of updating said correspondence information stored in said predetermined information storage means with the information relating to the change in said correspondence information.

20. (New) The communication handover method according to claim 3, wherein a link layer address of said access point is used as the information on said access point, and a link layer address of said access router, a network prefix and a prefix length of said subnet constituted by said access router are used as the information on said access router.

21. (New) The communication handover method according to claim 3, wherein said correspondence information describes a correspondence relationship between the information on said access point in said subnet to which said mobile node is currently connected, and the information on said access router, and a correspondence relationship between the information on said access point in said subnet present in a neighborhood of said subnet to which said mobile node is currently connected and the information on said access router.

22. (New) The communication handover method according to claim 3, wherein said correspondence information describes only a correspondence relationship relating to said access router which employs a scheme of permitting said mobile node to generate the

address information in said subnet, and said access point connected to said access router.

23. (New) A communication handover program for allowing a computer to execute the communication handover method according to claim 3.

24. (New) The communication system according to claim 13, structured in such a way as to execute a process by conventional handover when said mobile node cannot acquire the information on said access router to which said another access point is connected, from said correspondence information.

25. (New) The communication system according to claim 13, wherein a predetermined communication apparatus which manages said correspondence information is connected to said communication network, and is so structured as to transmit said correspondence information to said mobile node.

26. (New) The communication system according to claim 13, wherein when a change in the information on said access point or the information on said access router occurs, said predetermined

communication apparatus receives the information on said access point or the information on said access router after generation of the change, from said access router, updates said correspondence information managed by said predetermined communication apparatus, and informs said mobile node that said correspondence information has been changed.

27. (New) The communication system according to claim 13 structured in such a way that management of said correspondence information is performed by said access router to realize said predetermined communication apparatus by said access router.